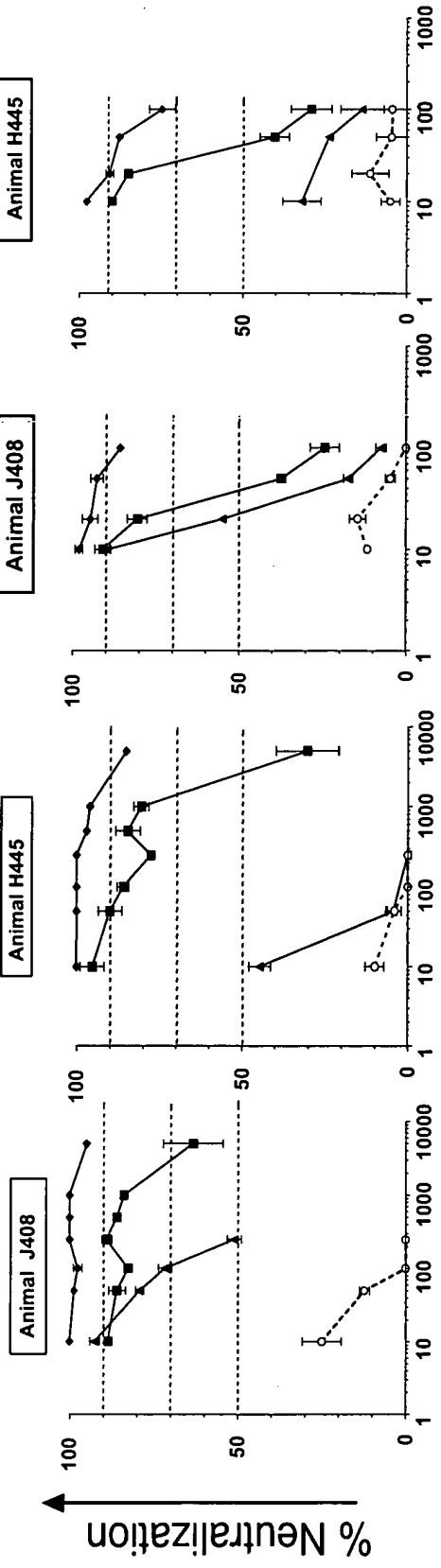
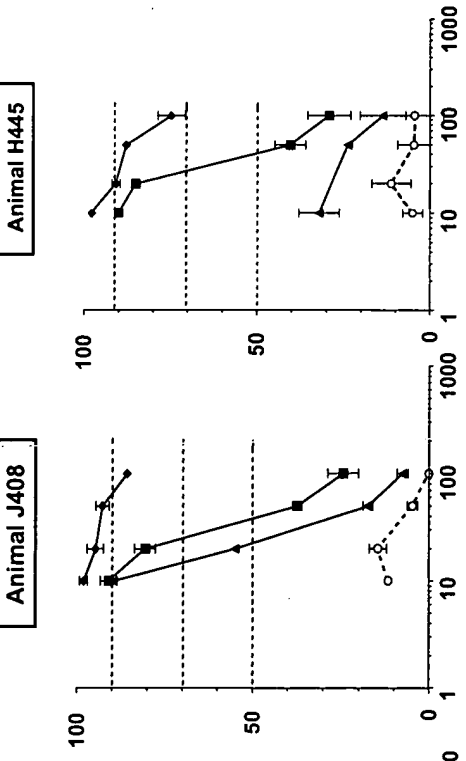


2570-1-001N FIGURE 1

Neutralization of SF162 Δ V2

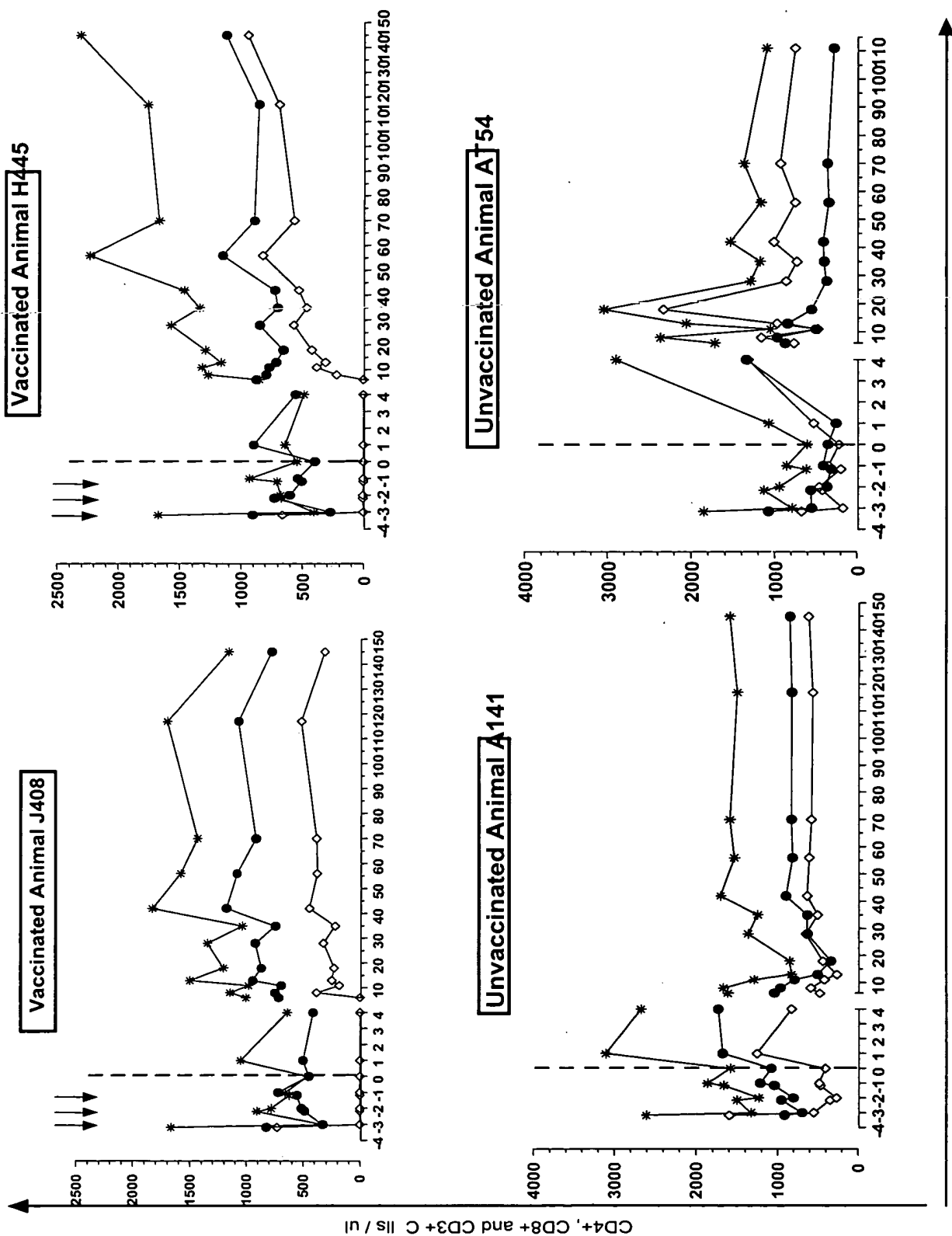


Neutralization of SF162

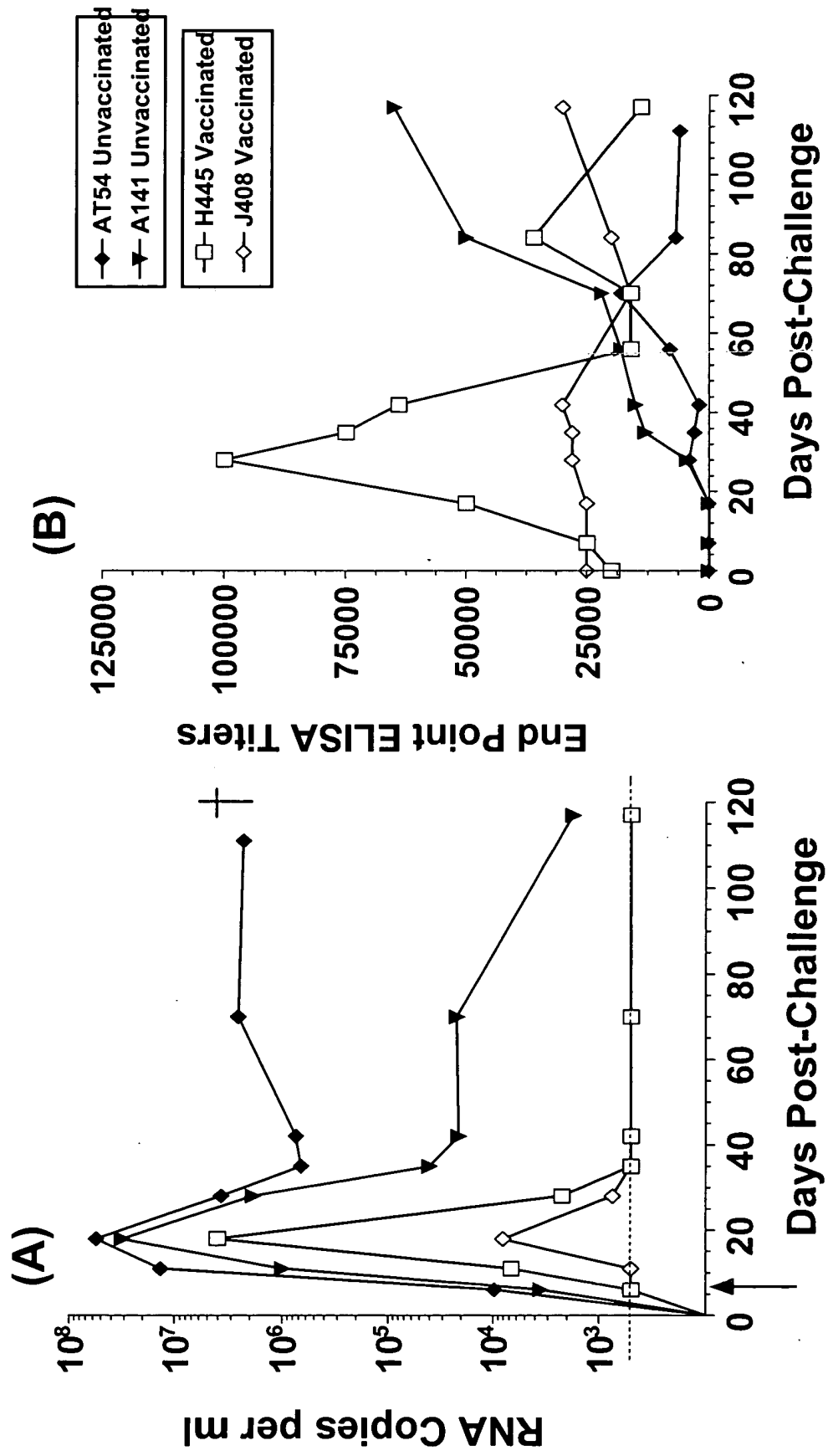


Serum Dilution

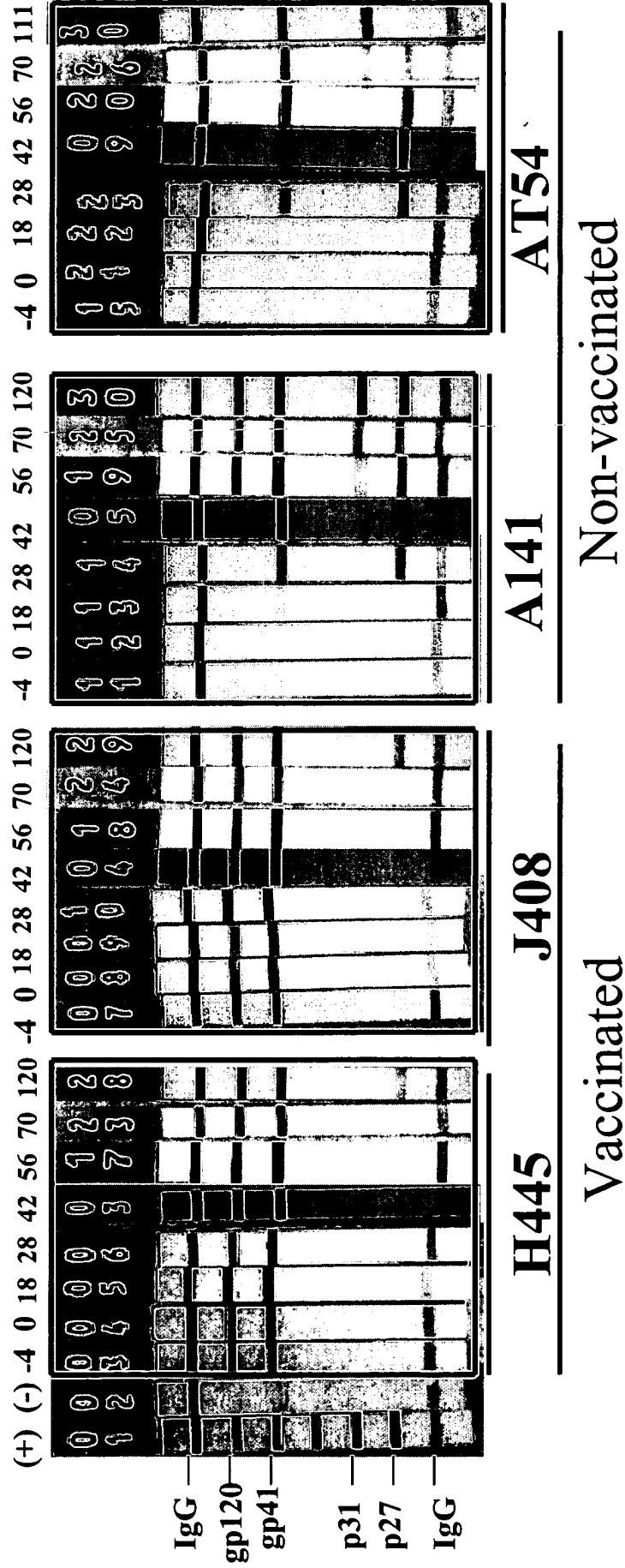
2570-1-001N FIGURE 3



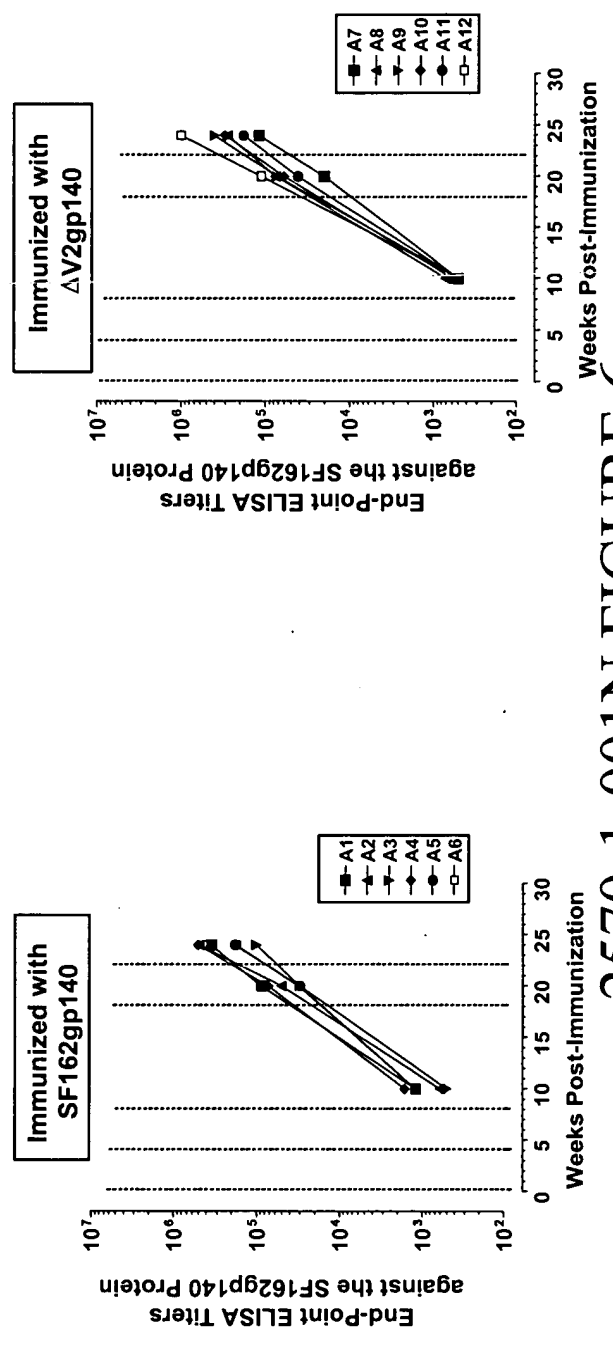
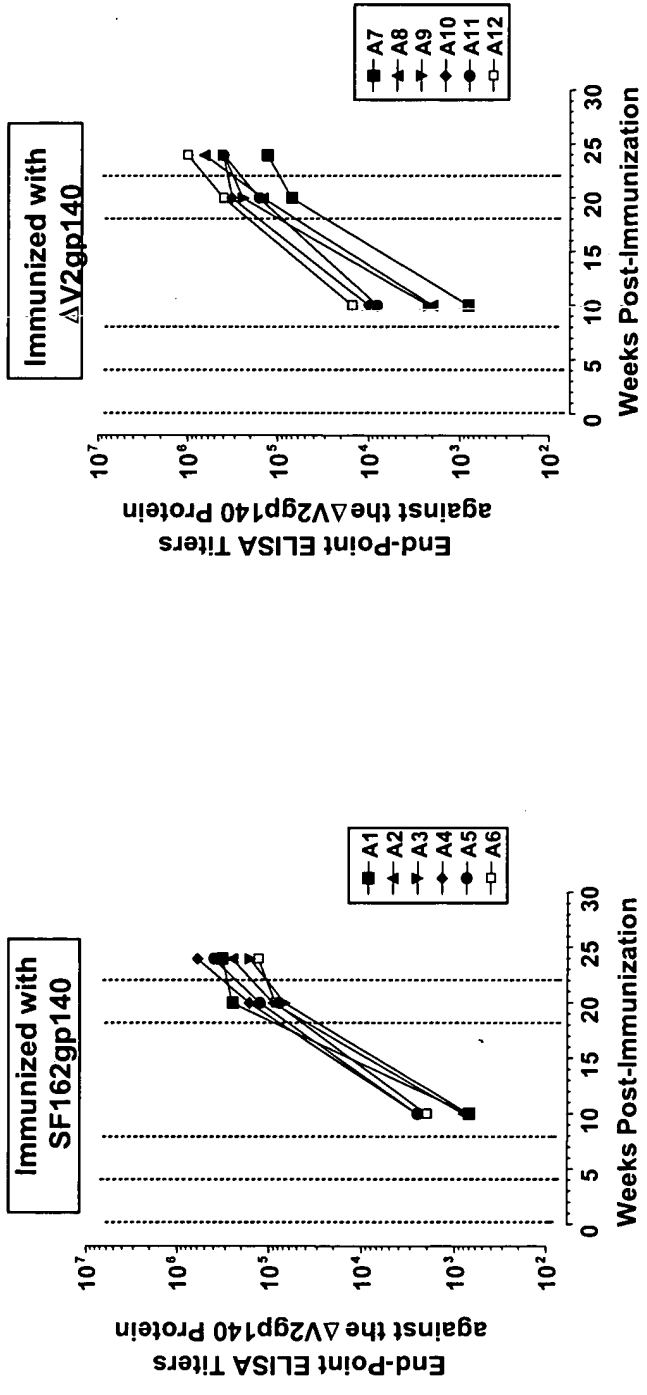
Days Post-Challenge



Seroconversion to SIV-gag/pol and HIV env Antigens



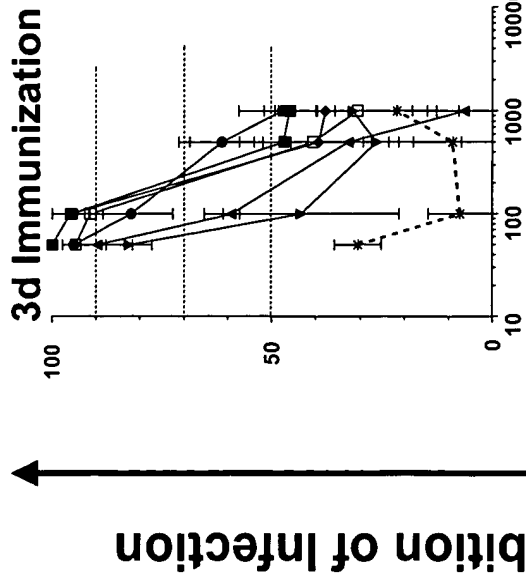
109290-6091660



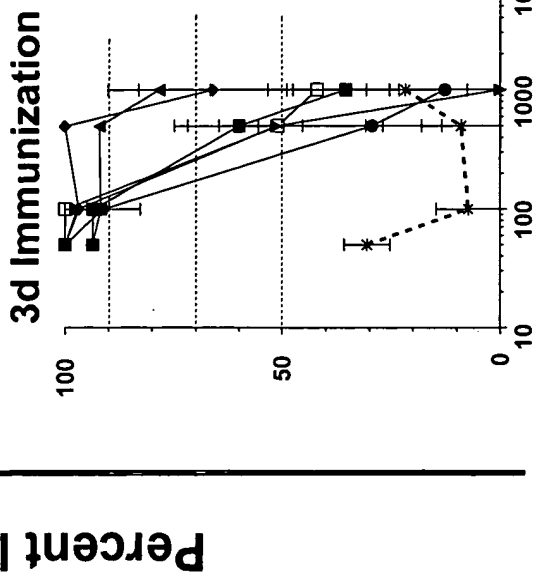
2570-1-001N FIGURE 6

2570-1-001N FIGURE 7a

Animals immunized with SF162gp140



Animals immunized with Δ V2gp140

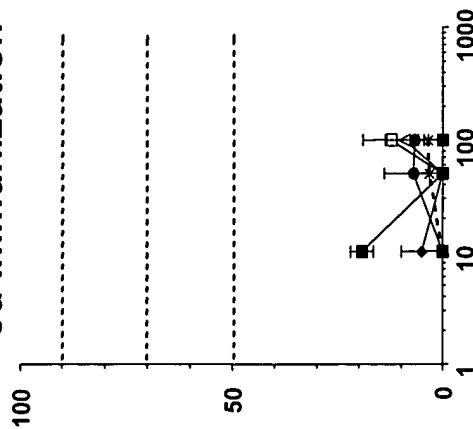


Serum Dilution

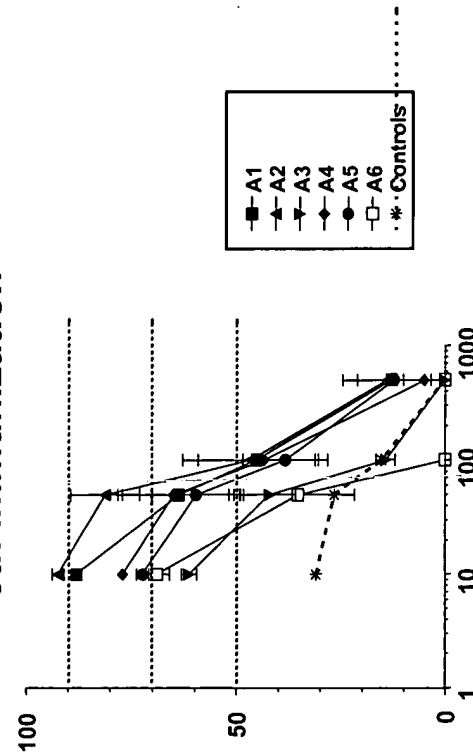
2570-1-001N FIGURE 7B

Animals Immunized with SF162gp140

3d Immunization

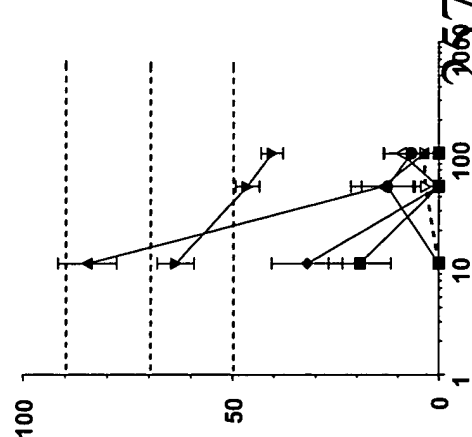


5th Immunization

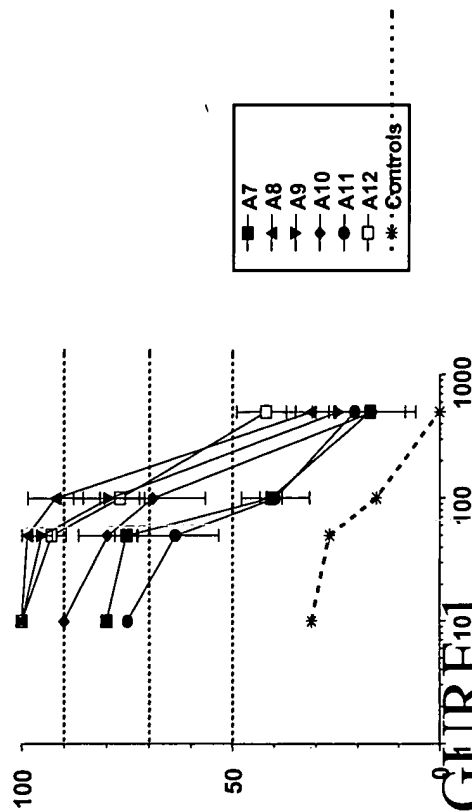


Animals immunized with Δ V2gp140

3d Immunization



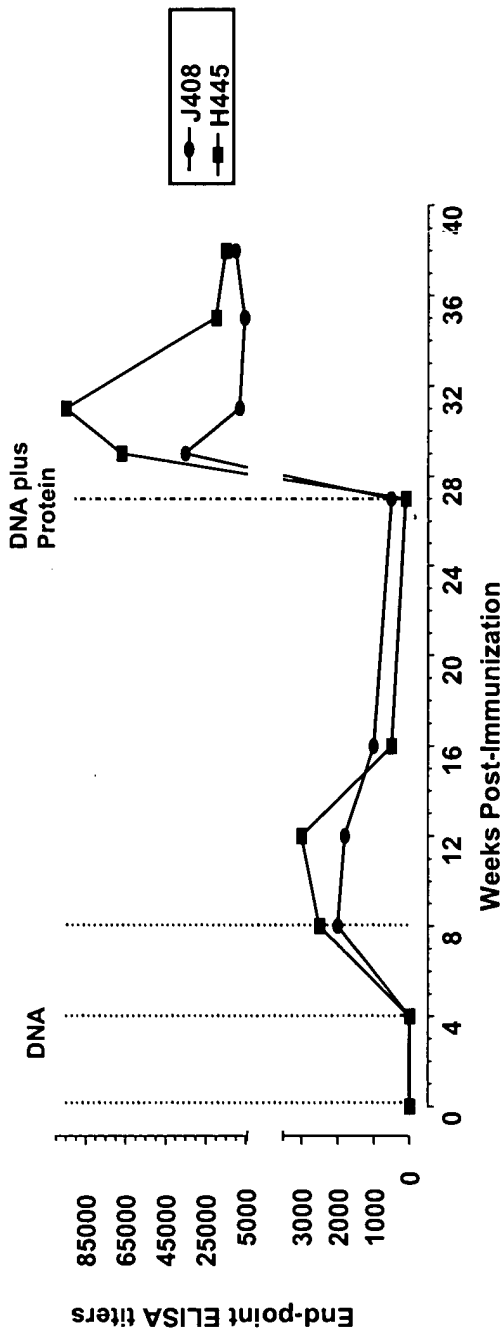
5th Immunization



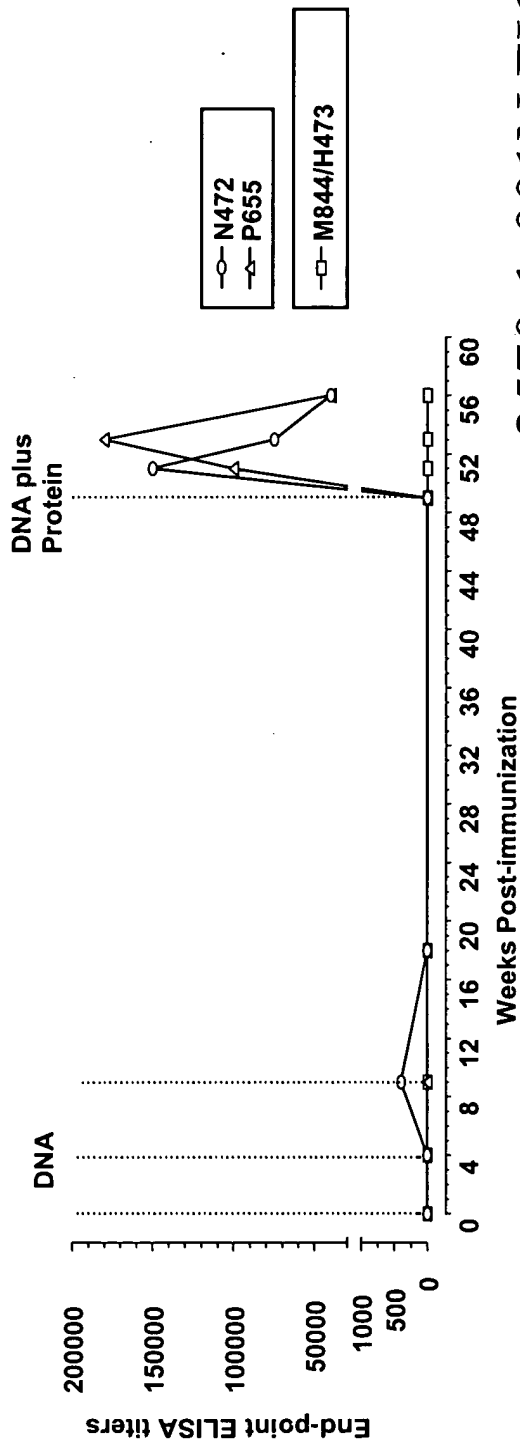
2069 2570-1-001N FIGURE 101

Serum Dilution

Immunization with the modified Δ V2gp140 immunogen

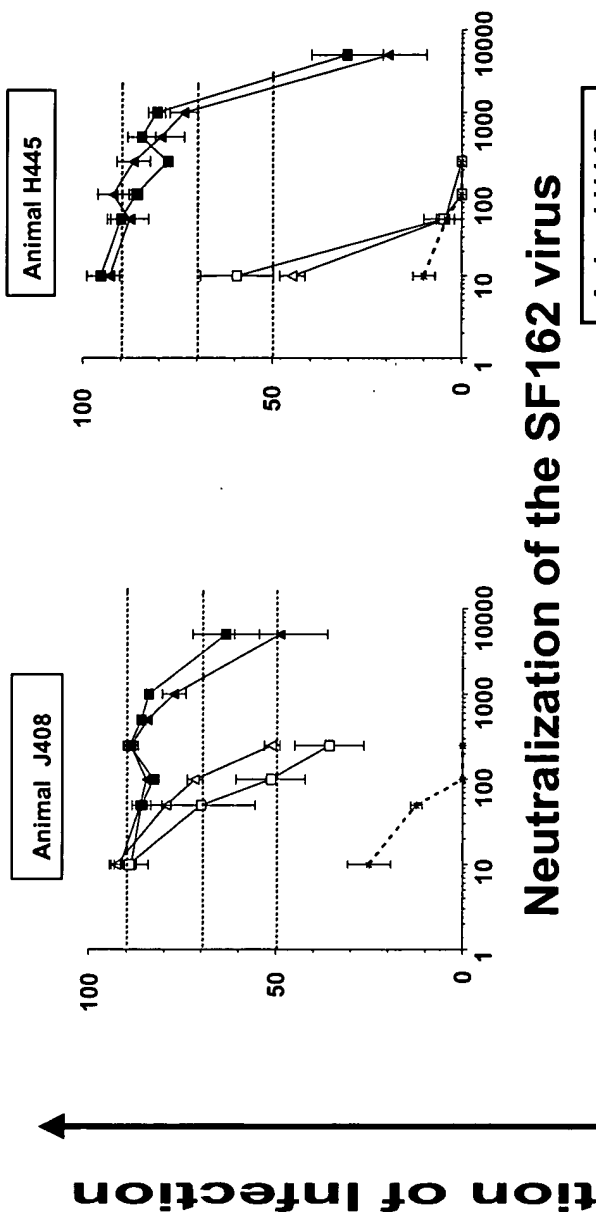


Immunization with the unmodified SF162gp140 immunogen

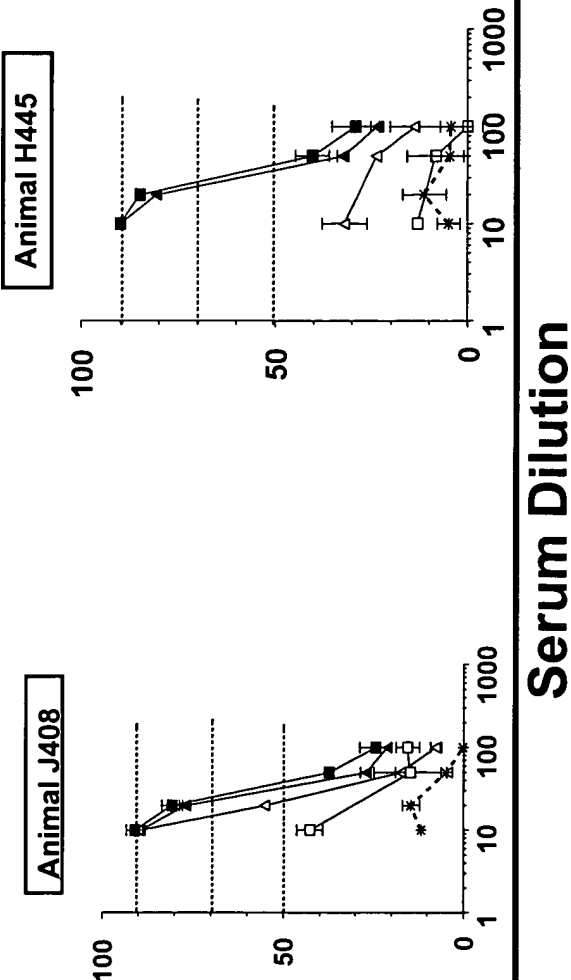


2570-1-001N FIGURE 9A

Neutralization of the SF162 Δ V2 virus

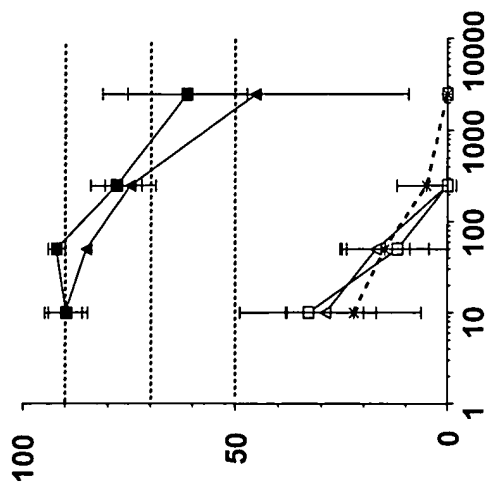


Neutralization of the SF162 virus



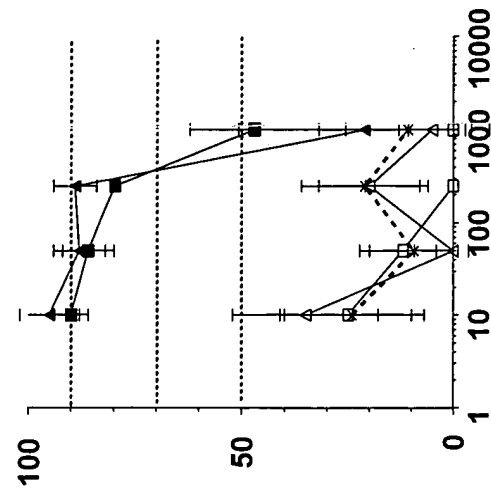
Neutralization of the SF162

Animal N472



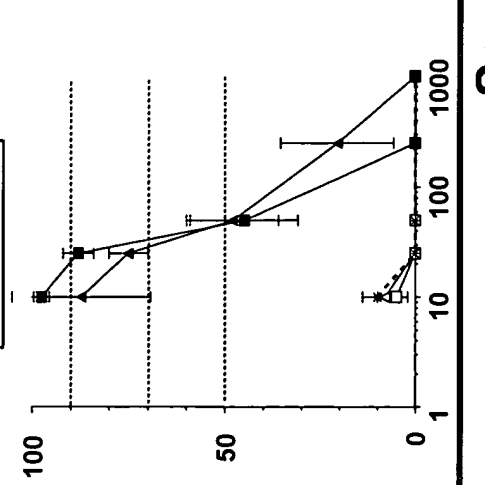
ΔV2 virus

Animal P655

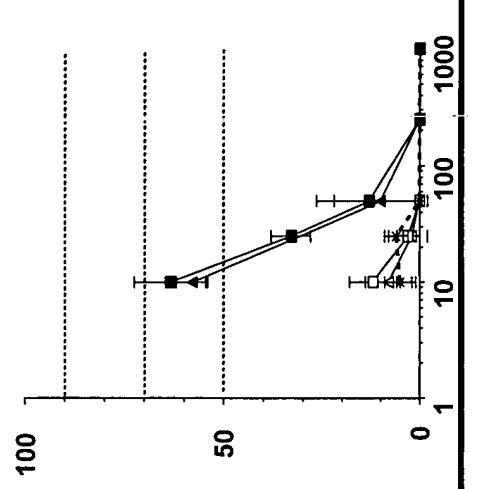


Neutralization of the SF162 virus

Animal N472



Animal P655



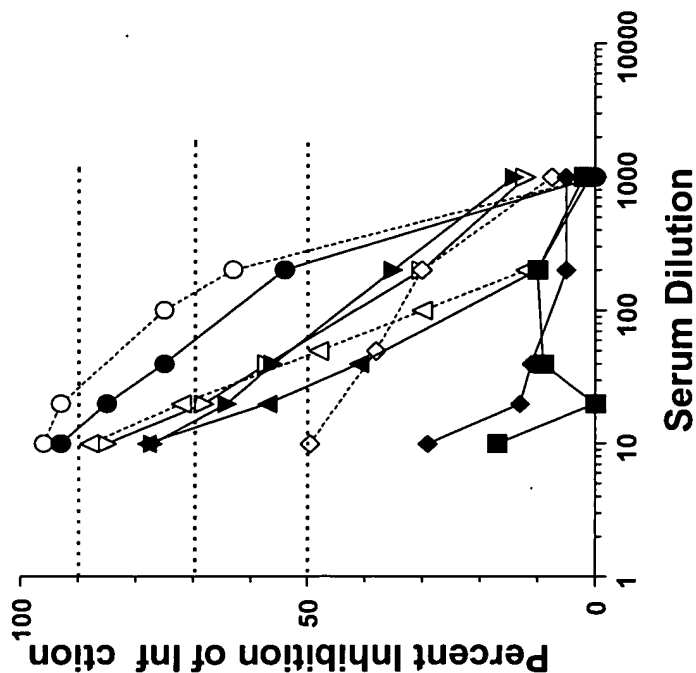
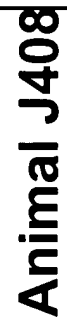
Serum Dilution

* Pre-bleeds ----
 □ 2nd DNA
 △ 3d DNA
 ■ 2 weeks post boost
 ▲ 4 weeks post boost

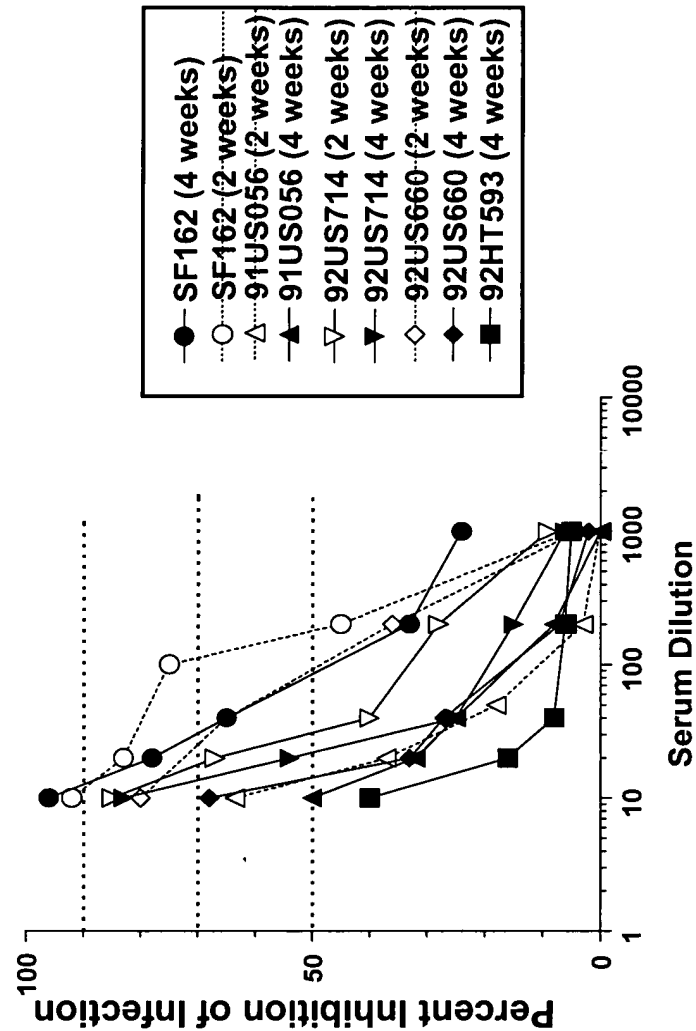
Percent Inhibition of Infection

[illegible]

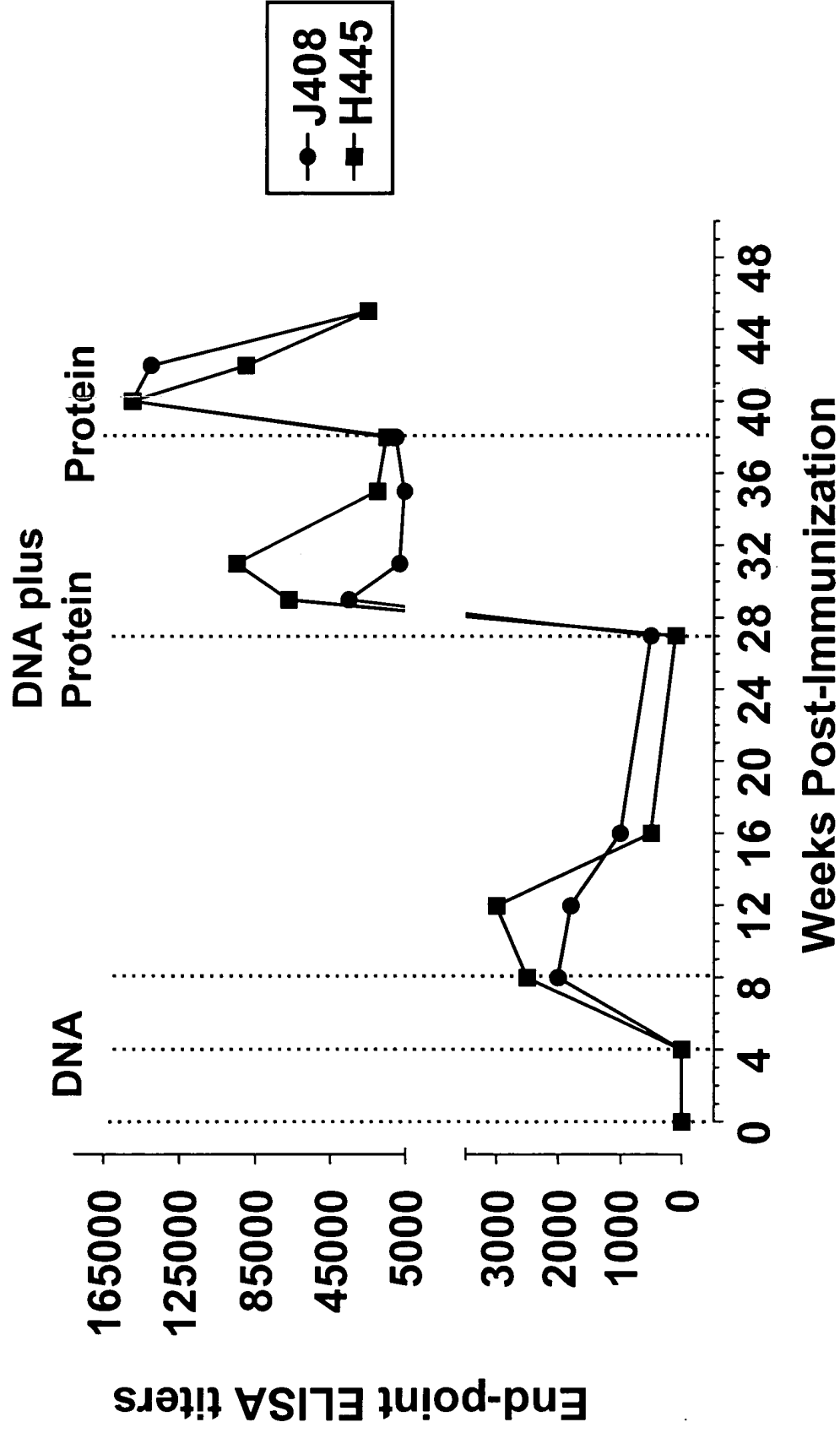
2570-1-001N FIGURE 10

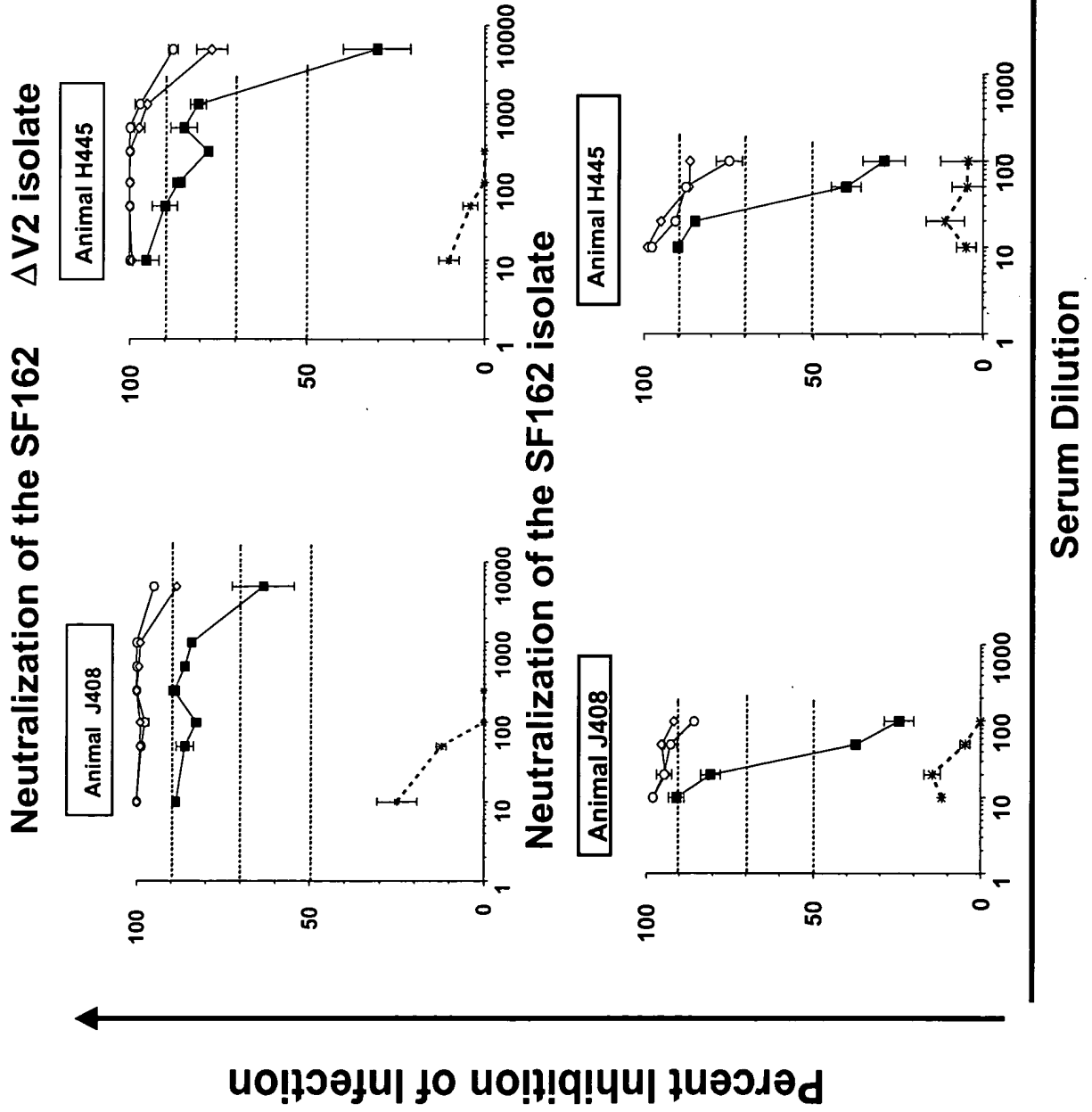


Animal H445

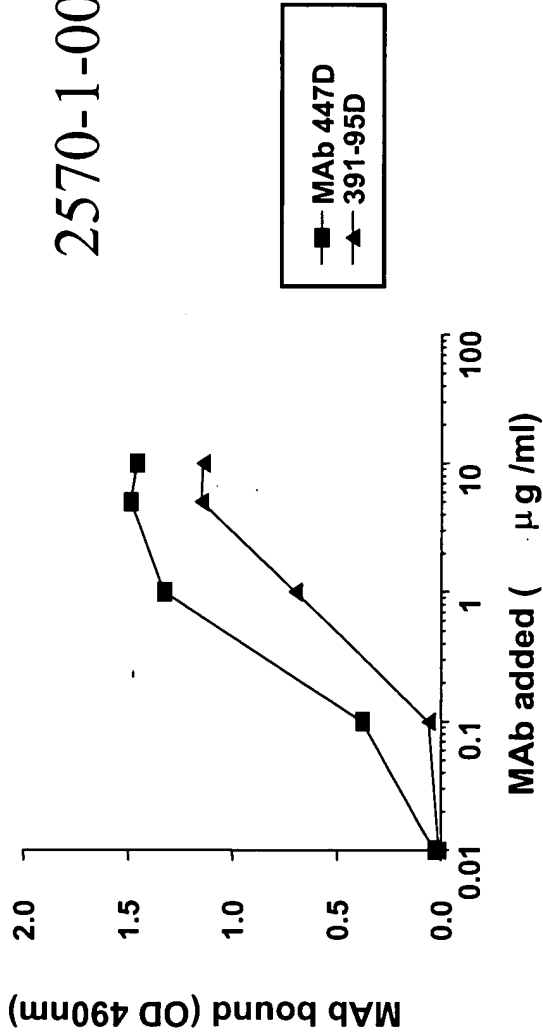


2570-1-001N FIGURE 11A

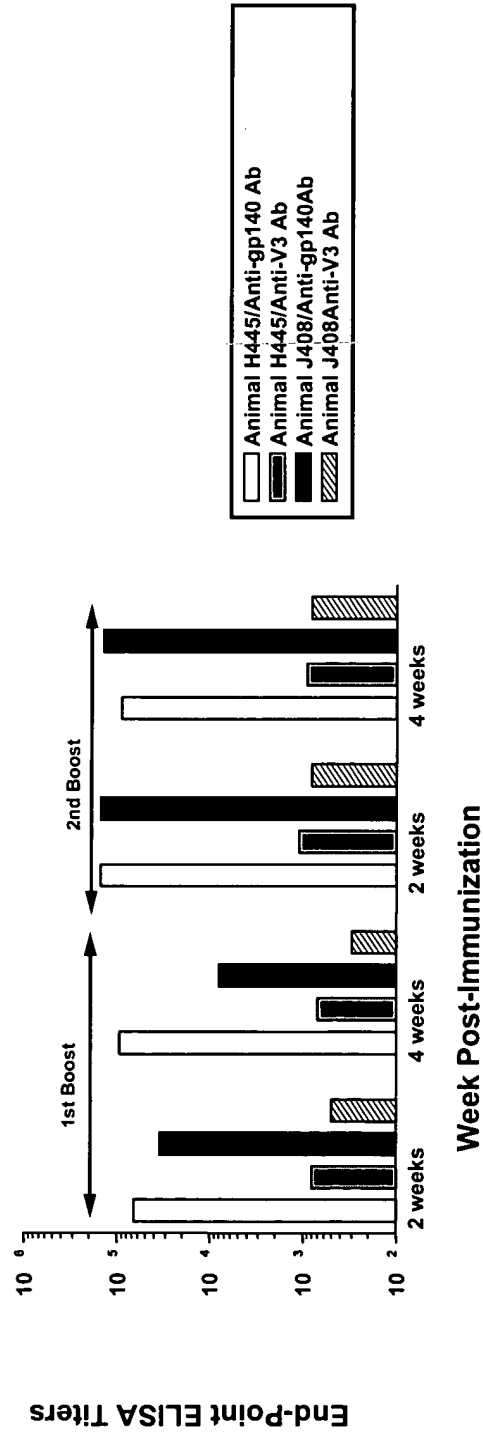




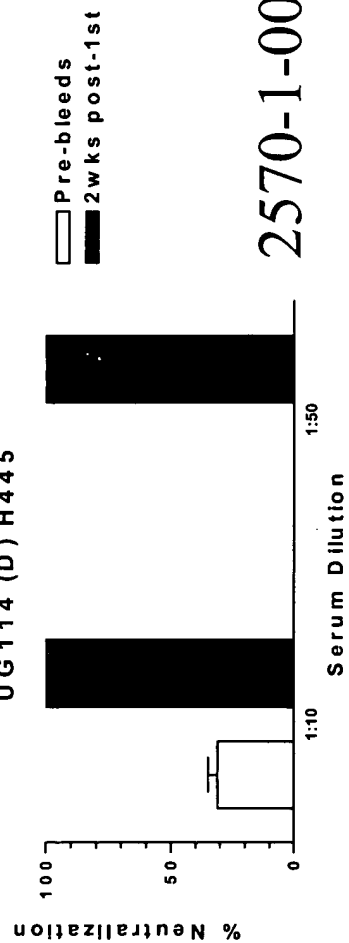
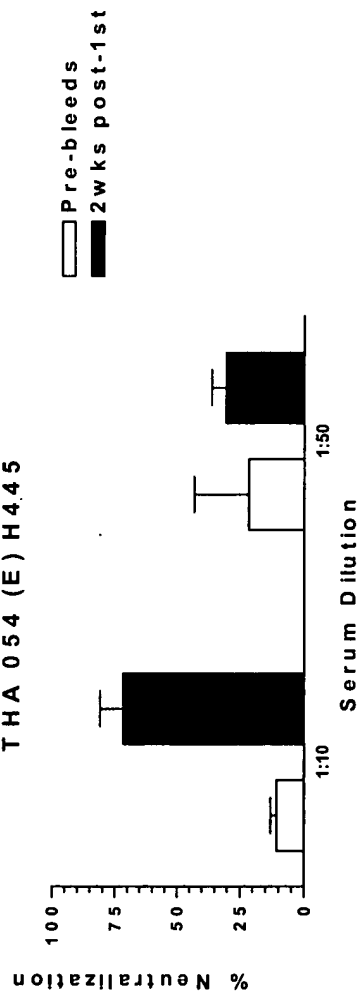
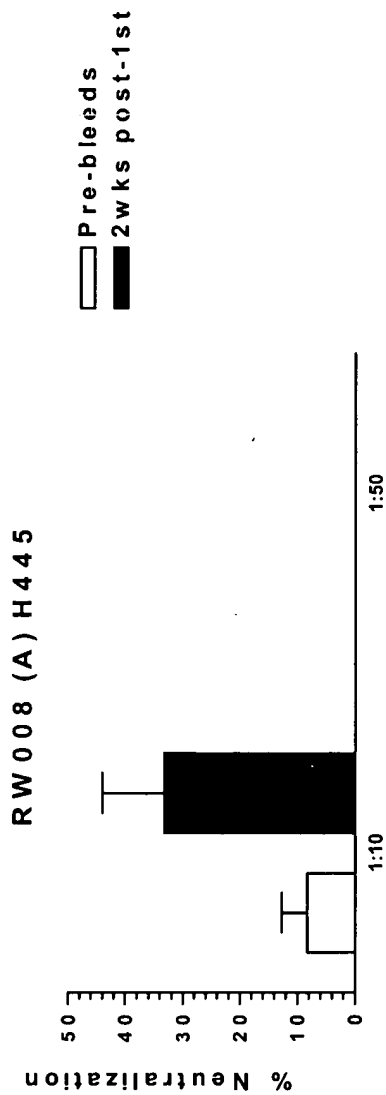
(A) Binding of Anti-V3 loop MAbs to the SF162 Δ V2-derived V3 loop peptide



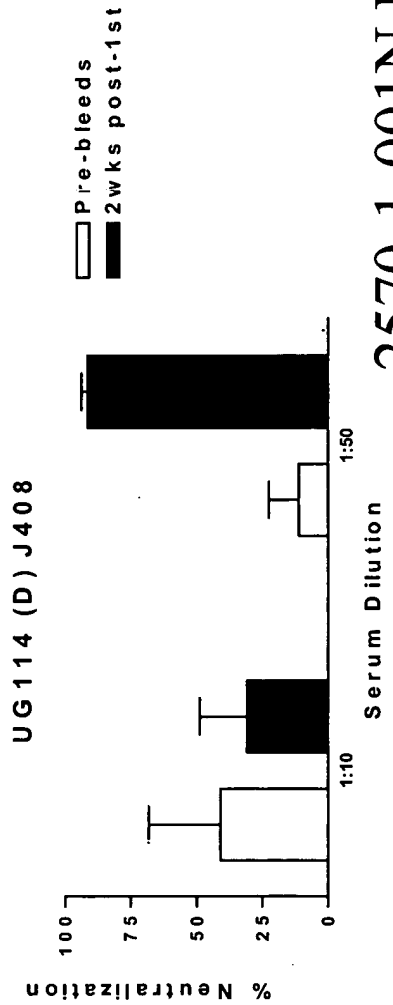
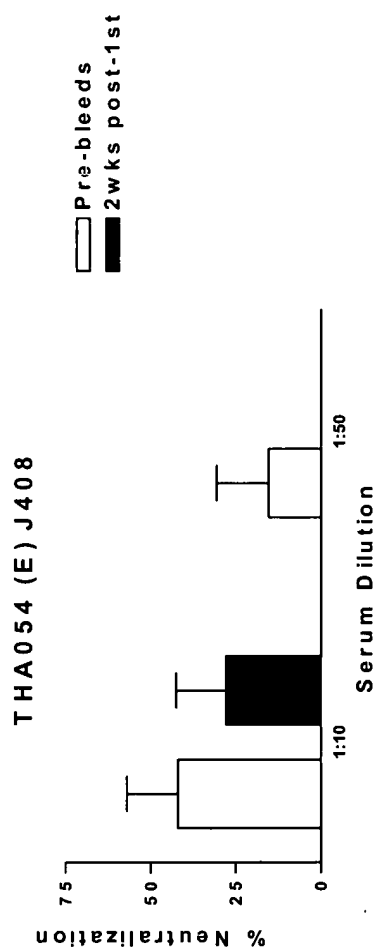
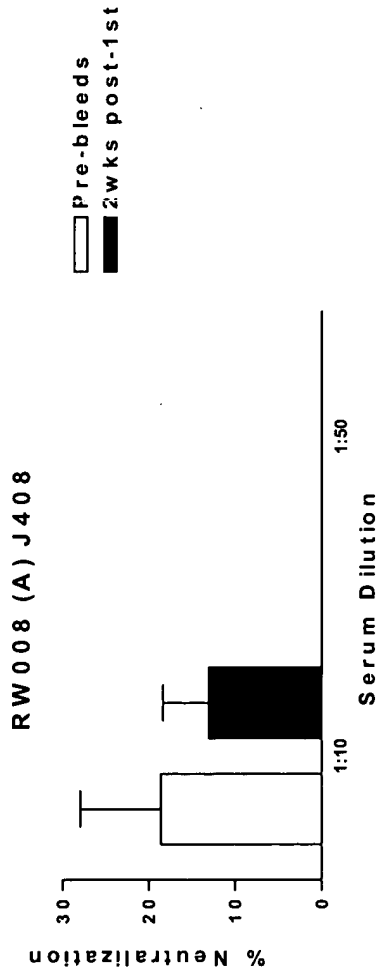
(B) Binding of macaque serum antibodies to the Δ V2gp140 protein and the corresponding V3 loop peptide



Neutralization of clade A, E and D HIV-1 viruses from
2570-1-001N sera collected from animal H445



Neutralization of clade A, E and D HIV-1 isolates from sera collected from animal J408



atgagagtg aaggggatca ggaagaatta tcagcacttg tggagagggg gcaccttgct
 ccttgggatg ttgatgatct gtatgtctgt agaaaattg tgggtcacag tctattatgg
 ggtacctgtg tggaaagaag caaccaccac tctattttgt gcatcagatg ctaaaagccta
 tgacacagag gtacataatg tctggggcac acatgcctgt gtaccacag accctaacc
 acaagaaata gtattggaaa atgtgacaga aaattttaac atgtggaaaa ataacatggg
 agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa
 gttaaaccca ctctgtgtta ctctacattg cactaatttg aagaatgcta ctaataccaa
 gagtagtaat tggaaagaga tggacagagg agaaataaaa aattgctctt tcaaggtc

-GGA-GCT-GGA-

aa attgataaat tgtaacacct cagtcattac
 acaggcctgt ccaaaggtat cctttgaacc aattcccata cattattgtg cccgggctgg
 ttttgcgatt ctaaagtga atgataagaa gttcaatgga tcaggaccat gtacaaatgt
 cagcacagta caatgtacac atggaattag gccagtagtg tcaactcaat tgctgttaaa
 tggcagtcta gcagaagaag gggtagtaat tagatctgaa aatttcacag acaatgctaa
 aactataata gtacagctga agaatctgt agaaattaat tgtacaagac ctaacaataa
 tacaagaaaa agtataacta taggaccggg gagagcattt tatgcaacag gagacataat
 aggagatata agacaagcac attgtaacat tagtggagaa aaatggaata acactttaaa
 acagatagtt acaaaattac aagcacaatt tgggaataaa acaatagtct ttaagcaatc
 ctcaggaggg gaccagaaa ttgtaatgca cagttttaat tgtggagggg aatttttcta
 ctgtaattca acacagcttt ttaatagtac ttggaataat actatagggc caataaacac
 taatggaaat atcacactcc catgcagaat aaaacaaatt ataaacaggt ggcaggaagt
 aggaaaaagca atgtatgccc ctccatcag aggacaaaatt agatgctcat caaatattac
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 tatggggcca cggtcactga cgctgacgg acaggccaga caattattgt ctggtatagt
 gcaacagcag aacaatttgc tgagagctat tgaggcgcaa cagcatctgt tgcactcac
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 tcaacagctc ctagggaattt ggggttgctc tggaaaactc atttgcacca ctgctgtgcc
 ttggaatgct agttggagta ataaatctct ggaatcagatt tgggaataaca tgacctggat
 ggagtgggag agagaaattg acaattacac aaacttaata tacaccttaa ttgaagaatc
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 acaagaaata gtattggaaa atgtgacaga aaattttaac atgtggaaaa ataacatggt
 agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa
 gttaacccca ctctgtgtta ctctacattg cactaatgtg aagaatgcta ctaataccaa
 gagtagtaat tggaaagaga tggacagagg agaaataaaa aattgctctt tcaagggtc

-GGA-GCT-GGA-

aa attgataaat tgtaacacct cagtcattac
 acaggcctgt ccaaagggtat cctttgaacc aattcccata cattattgtg ccccggtgg
 ttttgcgatt cttaaagtga atgataagaa gttcaatgga tcaggaccat gtacaaatgt
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 tatgggcgca cggtcactga cgctgacggt acaggccaga caattattgt ctggtatagt
 gcaacagcag aacaatttgc tgagagctat tgaggcgcaa cagcatctgt tgcaactcac
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 ttggaatgct agttggagta ataaatctct ggatcagatt tggaaataaca tgacctggat
 ggagtgggag agagaaattg acaattacac aaacttaata tacaccttaa ttgaagaatc
 gcagaaccaa caagaaaaaga atgaacaaga attattagaa ttggataagt gggcaagttt
 gtggaattgg ttgacatat caaaatggct gtggtatata aaa

T09290" 609T6860

Amino acid sequence of SF162DV2 gp140

MRVKGIRKNYQHLWRGGTLLGLMLICSAVEKLWVTVYYG
VPVWKEATTTLFCASDAKAYDTEVHNVWATHACVPTDPNPQ
EIVLENVTENFNMWKNMVEQMHEDIISLWDQSLKPCVKLT
PLCVTLHCTNLK^NATNTKSSNWKEMDRGEIK^NCSFKV-GAG-
KLINCNTSVITQACPKVSFEPIPIHYCAPAGFAILKCNDKKFN
GSGPCTNVSTVQCTHGIRPVVSTQLL^NNGSLAEEGVVIRSENF
TDNAKTIIVQLKESVEIN^CTRPN^NNRK^SITIGPGRAFYATGDI
IGDIRQAHCNISGEKW^NNTLKQIVTKLQAQFGN^KTIVFKQSS
GGDPEIVMHSFNCGGEFFYC^NSTQLFNSTW^NNTIGPN^NTNG
TITLPCR^IKQI^NRWQEVGKAMYAPP^IRGQIRC^SSNITGLLLTR
DGGKEIS^NTT^EIFRPGGDMRD^NNWRSEL^YKYKVV^KIEPLGV
APTKAKRRVVQREKRAVTLGAMFLGFLGAAAGSTMGARSL
TLTVQARQLLSGIVQQQNNLLRAIEAQQHLLQLTVWGILQ
ARVLAVERYLKDQQLLGIWGC^SGK^LICTTAVPW^NASW^SN^K
SLDQIWN^NMTWMEWEREID^NYTN^LIYTLIEESQN^QQKE^NE
QELLELDKWASLWNWFDISKWLWYIK

2570-1-001N FIGURE 16

Amino acid sequence of SF162DV2 gp140 less 27 amino acid N-terminal

SAVEKLWVTVYYG
 VPVWKEATTTLFCASDAKAYDTEVHNVWATHACVPTDPNPQ
 EIVLENVTENFNMWKNNMVEQMHEDIISLWDQSLKPCVKLT
 PLCVTLHCTNLKNA¹TNTKSSNWKEMDRGEIKNC²SKV-GAG-
 KLINCNTSVITQACPKVSFEPIPIHYCAPAGFAILKCNDKKN
 GSGPCTNVSTVQC³THGIRPVVSTQLLLNGSLAE⁴EGVVIRSENF
 TDNAKTIIVQLKESVEIN⁵CTRPNNNTRKSITIGPGR⁶AFYATGDI
 IGD⁷IRQAHCNISGEKWN⁸N⁹TLKQIVTKLQAQFGNKTIVFKQSS
 GGDPEIVMHSFNCGGEFFYC¹⁰NSTQLFNSTWN¹¹TIGPNN¹²TNG
 TTTLPCR¹³IKQI¹⁴NRWQEVGKAMYAPP¹⁵IRGQIRCSSNITGLLLTR
 DGGKEISNTTEIFRPGGGDMRD¹⁶NWRSEL¹⁷YKYKVVKIEPLGV
 APTKAKRRVVQREKRAVTLGAMFLGFLGAAGSTMGARSL
 TLT¹⁸VQARQLLSGIVQQQNNLLRAIEAQQHLLQLTVWG¹⁹IKLQ
 ARVLAVERYLKDQQLGIWGC²⁰SGKLICTTAVPWNASWSNK
 SLDDQIWN²¹NMTWMEWEREID²²NYTNLIYTLIEESQNQQEKNE
 QELLELDKWASLWNWFDISKWLWYIK

2570-1-001N FIGURE 17